



## Protea Family Care Instructions:

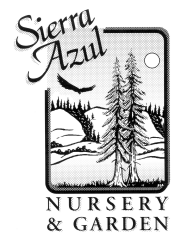
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The most popular members of the Protea family are Protea, Leucadendron (Cone flower), Leucospermum (Pincushion flower), Banksia and Grevillea. Most of these plants are native to South Africa and Australia and are typically drought-tolerant and deer-resistant. Some plants are easier to grow than others, but the same general care instructions apply to the group as a whole.

- **Protea**: Medium to large leafy shrubs that have some of the showiest flowers. The flowers of the most popular varieties look like cups of fur-tipped bird feathers with fuzzy centers. From South Africa.
- **Leucadendron (Cone flower)**: Medium to large shrubs with waxy tulip-like flowers in shades of yellow, gold and red. Handsome foliage year-round. From South Africa.
- **Leucospermum (Pincushion flower)**: Medium-sized spreading to upright shrubs, typically with grey-green foliage. Flowers resemble exploding balls of fireworks in yellow, orange and red tones. From South Africa.
- **Banksia**: Shrubs of various heights and widths up to tree-like proportions. Leaves are typically leathery and serrated. Unusual flowers look like large bottle-brushes in yellow, gold and orange. Woody and unique seed pods look like extraterrestrial play toys. From Australia.
- **Grevillea**: A vast array of growth habits ranging from groundcovers to medium and large shrubs and trees. Flowers are spider-like, toothbrush-shaped or drooping clusters in an array of colors including pink, cream, orange, red and gold. From Australia.

**Planting**: In general, the Protea family dislikes heavy clay soils, alkaline (high pH) and waterlogged conditions. Lighter, well-drained soils are preferred; however clay soils with good drainage can be amended to create a better growing environment. Planting mixes that include peat moss, finely ground bark and perlite are recommended at a rate of 30-50% mixed with native soil. Organic compost, especially manure-based products are not recommended.

**Fertilizing**: The Protea family members are not heavy feeders and require only small amounts of nitrogen and micronutrients such as iron and magnesium to flourish.



They are primarily intolerant of phosphorus (P) so any fertilizer used should contain less than 4% phosphorus. Recommended fertilizers are: Liquid Fish Emulsion, Cottonseed Meal and Iron Sulfate which contain adequate amounts of nitrogen, potassium and mineral-based iron. Annual applications of soil sulphur can be beneficial to counteract soil alkalinity and pathogenic soil fungi. Other fertilizers that may be used are ammonium sulfate and blood meal. February is usually the best month to fertilize.

**Watering:** Once established, the Protea family is very drought tolerant. Young, growing plants will need regular watering during the first year. Newly installed plants should not be allowed to completely dry out between waterings. Plants should receive an average of two to three gallons of water every week for the first two months and bi-weekly afterwards during the dry season of first year. During the dry season of the second year, plants may need monthly waterings to sustain active growth. Hand-watering can suffice but a drip-system may be more practical.

**Mulching:** Mulch is essential in providing moisture retention, weed suppression and erosion control, as well as providing a beautiful, finished aesthetic. Mulches range from ground sawdust to bark chips to shredded redwood. Apply mulch approximately three inches deep on all planted areas, being careful not to smother the crown or lower branches of new plants.

**Pruning:** Should be done on an annual basis. In general, Protea family plants need to be cut back after flowering. Most plants are finished blooming by June or July and subsequent pruning will shape, invigorate and properly direct growth for the coming season. Protea, Leucadendron, Leucospermum and Banksia benefit from cutting finished blooming stems halfway between spent flower and previous year's growth point. In general the Protea family does not like hard pruning on stems over ¼" in diameter, hence the need for an annual pruning program. The exception is Leucadendron which can take harder pruning on thicker stems.

By following the above care instructions, you should enjoy your drought-tolerant, beautiful Protea family plants for many years to come.